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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,486	06/15/2001	Jay H. Connelly	042390P11861	8023

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EXAMINER

SALCE, JASON P

ART UNIT	PAPER NUMBER
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2421

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/882,486	Applicant(s) CONNELLY, JAY H.	
	Examiner Jason P. Salce	Art Unit 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,11,13-15,43,53,56,86-90,92-94 and 96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,11,13-15,43,53,56,86-90,92-94 and 96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 8/14/2009 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Response to Arguments

Regarding the 112 1st Paragraph rejection, the Examiner agrees with Applicant's arguments, and the rejection has been withdrawn.

Applicant's arguments filed 8/14/2009 have been fully considered but they are not persuasive.

Applicant has the amended independent claims 10 and 53 to recite “***the explicit user input comprising the user assigning a specific single desirability value for each piece of content of some of the pieces of content available, the specific desirability value assigning a relative order of each piece of content among the pieces of content***” and argues that the prior art rejection fails to read on the amended claim limitations. The Examiner respectfully disagrees.

Herz discloses at Column 14, Lines 10-34 that a single desirability value is assigned to pieces of content. The value can be between a numerical value of 1 to 10, wherein if one piece of content is assigned a low value of 3 and another piece of

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content is assigned a high value of 9, a relative order has been established between the two pieces of content. Therefore, Herz teaches that the desirability value assigns a relative order of each piece of content among the pieces of content (**see the updated rejection below**).

In regards to independent claim 86, Applicant argues that Aras only teach how much data to send based on bandwidth capacity, but does not teach selecting a threshold for determining when to send data. The Examiner respectfully disagrees.

Aras teaches at Column 21, Lines 43-61 teaches that based on the bandwidth measurements, different thresholds are selected that dictate when to send an entire BCT or portions of the BCT at different intervals. Therefore, Aras teaches determining when (**and how much data to send**) based on the bandwidth measurements.

Applicant further argues that Aras fails to teach that the threshold is selected considering a rate at which content and content descriptors are received at the client. The Examiner respectfully disagrees.

The BCT of Aras represents the content and content descriptors received at the client and the threshold is selected based on how fast that table is populated (**see Column 20, Lines 60-67 for transmitting a BCT when a maximum size has been reached**). As described in the previous Office Action, the BCT represents content and content descriptors collected for each piece of content received, therefore when the BCT reaches a maximum size for data (**content and content descriptors**) collected,

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and the threshold being selected based on how much of the maximum BCT can be transmitted back to the server, then clearly Aras teaches that the threshold is selected considering all three factors of a bandwidth capacity of a connection between the client and the server, a rate at which content is received at the client, and a rate at which the content descriptors are received at the client.

Further, the Examiner notes that the threshold is determined based on the size of the BCT, which collects data based on content and content descriptors (**contained in the broadcasted television programs**) selected by the viewer. Therefore, the threshold is inherently based on the rate at which content and content descriptors are received at the client, because broadcast television broadcast are inherently received at a constant rate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 12-15, 53, 56 and 86-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al. (U.S. Patent No. 6,177,931) in view of Aras et al. (U.S. Patent No. 5,872,588) in further view of Herz et al. (U.S. Patent No. 5,758,257).

Referring to claim 10, Alexander discloses receiving, at a client, content descriptors, which describe pieces of content available for future broadcast from a server **(see Column 8, Lines 18-35 for downloading EPG information that provides television program information which describes various types of television programs and also note Column 4, Lines 54-56 for the EPG providing television program listings at future times).**

Alexander also discloses generating demand data at the client **(see Column 28, Lines 30-52 for recording every action a user makes when interacting with an EPG)** indicating the relative desirability of the pieces of content described by the content descriptors **(the examiner notes that when recording the user interactions (see again Column 28, Lines 30-52) channel changes, time of the channel change and the identification of what programming was displayed after channel change all represent that the demand data (viewer profile information collected) indicates the relative desirability of the pieces of content (television programs) described by the content descriptors (EPG information)).**

Alexander also discloses sending demand data feedback from the client to the server after a predetermined amount of pieces of content has been utilized since the last time demand data feedback was sent to the server **(see Column 29, Lines 14-21 for sending the viewer profile information to the headend (server) of the television system and Column 29, Lines 24-27 for collecting data during predetermined time intervals since a previous analysis, therefore sending demand data feedback after a predetermined amount of pieces of content (content utilized during a**

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predetermined time interval) after a previous time interval (last time demand data feedback was sent)) and the demand data related to the utilized pieces of content has been generated (see Column 29, Lines 40-41 for teaching that the profile data sent from the client to server contains interactions with the EPG (such as tuning to and displaying (generating) television programs on multiple channels)), the demand data feedback to indicate the relative desirability of the pieces of content available for future broadcast (again note that the viewer profile contains information representing user interactions (see again Column 28, Lines 30-52) such as channel changes, time of the channel change and the identification of what programming was displayed after channel change, which all represent that the demand data feedback (viewer profile information collected and transmitted back to the headend) indicates the relative desirability of the pieces of content (television programs) described by the content descriptors (EPG information)).

Alexander fails to disclose generating and transmitting demand data back to the server based on a predetermined threshold count of a plurality of pieces of content consumed.

Aras discloses a system similar to Alexander by teaching collection of program information and upon consumption of the video program, extracting the program information and generating demand data in the form of a behavior collection table (**see Figure 6(f) and Column 16, Lines 60-67**). However, instead of teaching generating and sending the demand data back to the headend during specified time intervals (**as taught by Alexander above**), Aras discloses generating and transmitting the behavior

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collection table back to the server once a predetermined amount/threshold has been met (**see Column 17, Lines 5-14**).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the demand data generation and transmission functionality, as taught by Alexander, using the demand data generation and transmission based on a predetermined amount/threshold, as taught by Aras, for the purpose of identifying and recording audio-visual information in an efficient manner to produce viewing statistics (**see Column 2, Lines 54-56 of Aras**).

Alexander and Aras fails to teach ranking the pieces of content and receiving explicit user input, as claimed.

Herz discloses a viewer profile collection system (**see Figure 1**), where the user can rank pieces of content (**see Column 13, Line 55 through Column 14, Line 34 for ranking a piece of content (with a value of 8) from the movie First Blood, which represents an action section**).

Herz discloses providing explicit user input, where the user assigns a specific single desirability value for each piece of content of some of the pieces of content available (**see Column 14, Lines 10-34 for assigning a desirability value between 4-6 for indicating an "acceptance" range, thereby indicating if the user desires to view programs like Rambo First Blood**), the specific single desirability value assigning a relative order of each piece of content among the pieces of content (**see again Column 14, Lines 10-34 for assigning an acceptance value between 4-6, which represents a set of possible desirability values. Since the value can be**

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between a numerical value of 1 to 10, wherein if one piece of content is assigned a low value of 3 and another piece of content is assigned a high value of 9, a relative order has been established between the two pieces of content).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify viewer profile collection process, as taught by Alexander and Aras, using the functionality of ranking the pieces of content, as taught by Herz, for the purpose of determining which data sources of those available will have the most appeal to his or her customers (**see Column 9, Lines 49-51 of Herz**).

Claim 13 corresponds to claim 10, where Alexander teaches that the sending of the demand data feedback to the server comprises sending demand data to the server after demand data related to a first predetermined number of pieces of content have been generated (see the rejection of claim 10 for Alexander teaching sending demand data feedback to the server after the demand data related to a predetermined amount of pieces of content being generated by collecting the viewer profile information continuously during predetermined time periods and note that since a time period is predetermined by the user, then clearly a predetermined number of pieces of content are generated and then reported to the server/headend within the time period). Further note the rejection of claim 10 for Aras for providing a more explicit teaching of the claimed limitations.

Referring to claim 14, see the rejection of claim 10.

Referring to claim 15, see the rejection of claim 14 and further note that ranking a piece of content by assigning a number also constitutes assigning a piece of content a rating.

Referring to claim 53, see the rejection of claim 10.

Referring to claims 56, see the rejection of claim 15.

Referring to claim 86, see the rejection of claim 10.

The Examiner notes that the Aras reference, further teaches a feature for managing upstream bandwidth and only sending feedback data to the server according to a threshold, wherein the threshold is selected considering a bandwidth capacity of a connection between the client and the server (**see Column 20, Line 43 through Column 22, Line 26**).

Aras also teaches at Column 20, Line 43 through Column 22, Line 42 that a threshold is selected considering a bandwidth capacity of a connection between the client and the server. The same cited section further teaches that a threshold is selected considering the rate at which content and content descriptors are received at the client (**see Figure 12 for the Behavior Collection Table (BCT) being populated with data received by the client, wherein the data stored in the BCT contains content (AVI number representing the program viewed) and content descriptors (start and end times)**) and further note that the threshold is selected considering

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the rate these pieces of data are received and stored in the BCT at Column 21, Line 43 through Column 22, Line 2 for selecting either a batch-send threshold (*sending the content and content descriptors in the BCT in a batched transmission format, wherein a BCT will not be sent until the BCT is full*) or a stop-send threshold (*only sending the content and content descriptor in the BCT when instructed*), therefore a threshold is considered based on the rate at which the client receives content and content descriptors).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to further modify the profile reporting system, as taught by Alexander and Herz, to utilize the bandwidth monitoring and threshold setting system, as taught Aras, for the purpose of providing tremendous flexibility in controlling the reverse channel bandwidth in the system (**see Column 20, Lines 65-67 of Aras**).

Referring to claims 87-88, the specification at page 25, lines 6-20 states that “the clients are assumed to consume content at different rates” and “As a result, some clients will have consumed more content than other clients in a given amount of time”. Again, Alexander clearly teaches at Column 28, Lines 11-28 for the invention of Alexander creating different viewer profiles for multiple viewers and that each viewer profile contains a viewer’s favorite types of programs. Alexander further teaches at Column 30, Lines 38-44 that the Profile Program analyzes an individual’s Viewer Profile as compared to the Viewer Profile of others so that the Profile Program can determine the likelihood that the subject viewer will prefer or be interested in a particular subject,

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product, theme, movie, etc. based on the comparison to **similar** Viewer Profiles.

Therefore, since multiple **similar** viewer profiles are being gathered and compared, clearly not every person watches the same number of shows at exactly the same time and if this were the case, there would be no need for a comparative analysis program and the television headend could simply send the same program listings (with favorites) to each client device, because each viewer (having the exact same profile) would have no need for an EPG with varied programs and advertisements. Therefore, Alexander clearly teaches that a client utilizes the predetermined amount of pieces of content at a different rate than a different client and that for a given amount of time, the client consumes more content than the other client. Applicant's own specification clearly states the limitation of claim 88 are a direct (inherent) result of the clients utilizing the content at different rates.

Referring to claims 89-90, see the cited portion of Aras in the rejection of claim 10.

Referring to claims 92-93, see the rejection of claim 10.

Referring to claim 94, Alexander teaches that the generation of demand data related to the pieces of content described by the content descriptors (see the rejection of claim 10) comprises receiving implicit user input regarding specific pieces of content based on content consumption (see Column 28, Lines 30-52 for the user changing a

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channel or any interaction with the EPG, which all represent an implicit user input regarding the specific pieces of content). Further note the rejection of claims 87-88 for users consuming content at different rates than other users.

Referring to claim 96, see the rejection of claim 86

Claims 11 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander et al. (U.S. Patent No. 6,177,931) in view of Aras et al. (U.S. Patent No. 5,872,588) in further view of Herz et al. (U.S. Patent No. 5,758,257) in further view of Proehl et al. (U.S. Patent No. 6,990,676).

Referring to claim 11, Alexander discloses that the generation of the demand data comprises consuming previews of the pieces of content (see Column 20, Lines 13-25 for instructing the EPG to display a video clip (preview) about a future-scheduled television program), the generation of demand data responsive to the previews of the pieces of content that are consumed (see again Column 28, Lines 30-52 for recording interactions with the EPG and specifically note Column 28, Lines 44-52 for recording every instruction to record or watch a program and also the EPG recording what is displayed in every window of the EPG user interface before and after a channel change).

Alexander, Aras and Herz are silent as to the previews being locally stored at the client.

Proehl discloses that previews for future television programs can be locally stored at the client (see Column 14, Line 67 through Column 15, Line 17 and Column 17, Lines 15-25).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the previews, as taught by Alexander, Aras and Herz, using the functionality of storing the previews locally at the client, as taught by Proehl, for the purpose of avoiding any delay caused by downloading a preview from a server/headend if the user selects additional information for a television program that will be broadcast in the future, thereby allowing a viewer to instantaneously view a preview upon selection by the viewer.

Referring to claim 54, see the rejection of claim 11.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason P Salce/
Primary Examiner, Art Unit 2421

Jason P Salce
Primary Examiner
Art Unit 2421

December 1, 2009